## What is claimed is:

- 1. A method of increasing hematopoietic stem cell production in a subject comprising a step of administering a TPO mimetic compound to said subject.
- 2. A method of providing hematopoietic stem cells to a subject comprising the5 steps of:

administering a TPO mimetic compound to a subject to enhance expansion of a stem cell population within bone marrow and/or mobilize stem cells in peripheral circulation;

harvesting one or more of the bone marrow stem cells or the stem cells in the peripheral circulation; and

transplanting the harvested stem cells into the subject.

- 3. The method of claims 1 and 2, wherein the subject is a human.
- 4. The method of claim 2, wherein the one or more stem cells are cryopreserved after harvesting.
- 15 5. The method of claim 4, wherein the one or more cryopreserved stem cells are thawed and determined to be viable prior to transplanting the stem cells into the subject.
  - 6. The method of claim 4, wherein the one or more stem cells are transplanted into the subject when the subject is in need of such transplantation.
- 7. The method of claims 1 and 2, wherein the TPO mimetic compound has reduced immunogenicity relative to one or more of rhTPO and rhIL-11.
  - 8. The method of claims 1 and 2 wherein the TPO mimetic compound has an improved PK profile relative to one or more of rhTPO and rhIL-11.
- 9. A method of reducing a time to engraftment following reinfusion of stem cells25 in a subject comprising the steps of:

administering a TPO mimetic compound to the subject;

enhancing the expansion of the stem cell population within bone marrow and/or mobilizing the stem cells in peripheral circulation; and

harvesting one or more of the bone marrow stem cells or one or more of the stem cells in the peripheral circulation; and

transplanting the one or more harvested stem cells into the subject.

10. A method of reducing the incidence of delayed primary engraftment comprising the steps of:

administering a TPO mimetic compound to the subject;

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enhancing the expansion of the stem cell population within bone marrow and/or mobilizing the stem cells in peripheral circulation; and

harvesting one or more of the bone marrow stem cells or one or more of the stem cells in the peripheral circulation; and

transplanting the one or more harvested stem cells into the subject.

11. A method of reducing the incidence of secondary failure of platelet production comprising the steps of:

administering a TPO mimetic compound to the subject;

enhancing the expansion of the stem cell population within bone marrow and/or mobilizing the stem cells in peripheral circulation; and

harvesting one or more of the bone marrow stem cells or one or more of the stem cells in the peripheral circulation; and

transplanting the one or more harvested stem cells into the subject.

20 12. A method of reducing the time of platelet and/or neutrophil engraftment following reinfusion of stem cells in a subject comprising the steps of:

administering a TPO mimetic compound to the subject;

enhancing the expansion of the stem cell population within bone marrow and/or mobilizing the stem cells in peripheral circulation; and

harvesting one or more of the bone marrow stem cells or one or more of the stem cells in the peripheral circulation; and

transplanting the one or more harvested stem cells into the subject.